

Amendments to the Claims:

Please amend claim 33 as shown below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-32. (Canceled)

33. (Amended) A compound of the formula:



wherein,

T^{ms} is an organic group detectable by mass spectrometry, comprising carbon, at least one of hydrogen and fluoride, and optional atoms selected from oxygen, nitrogen, sulfur, phosphorus and iodine;

L is an organic group which allows a T^{ms} -containing moiety to be cleaved from the remainder of the compound, wherein the T^{ms} -containing moiety comprises a functional group which supports a single positively ionized charge state when the compound is subjected to mass spectrometry and is selected from tertiary amine and, quaternary amine and organic acid;

X is MOI other than nucleic acid fragment, and the compound has a mass of at least 250 daltons.

34. (Original) A compound according to claim 33 wherein T^{ms} has a mass of from 15 to 10,000 daltons and a molecular formula of $C_{1-500}N_{0-100}O_{0-100}S_{0-10}P_{0-10}H_{\alpha}F_{\beta}I_{\delta}$ wherein the sum of α , β and δ is sufficient to satisfy the otherwise unsatisfied valencies of the C, N and O atoms.

35. (Original) A compound according to claim 33 wherein T^{ms} and L are bonded together through a functional group selected from amide, ester, ether, amine,

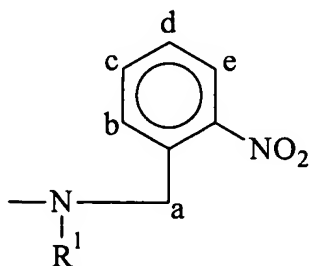
sulfide, thioester, disulfide, thioether, urea, thiourea, carbamate, thiocarbamate, Schiff base, reduced Schiff base, imine, oxime, hydrazone, phosphate, phosphonate, phosphoramidate, phosphonamide, sulfonate, sulfonamide or carbon-carbon bond.

36. (Original) A compound according to claim 35 wherein the functional group is selected from amide, ester, amine, urea and carbamate.

37. (Original) A compound according to claim 35 wherein L is selected from L^{hv} , L^{acid} , L^{base} , $L^{[O]}$, $L^{[R]}$, L^{enz} , L^{elc} , L^{Δ} and L^{ss} , where actinic radiation, acid, base, oxidation, reduction, enzyme, electrochemical, thermal and thiol exchange, respectively, cause the T^{ms} -containing moiety to be cleaved from the remainder of the molecule.

38. (Original) A compound according to claim 37 wherein L^{hv} has the formula $L^1-L^2-L^3$, wherein L^2 is a molecular fragment that absorbs actinic radiation to promote the cleavage of T^{ms} from X, and L^1 and L^3 are independently a direct bond or an organic moiety, where L^1 separates L^2 from T^{ms} and L^3 separates L^2 from X, and neither L^1 nor L^3 undergo bond cleavage when L^2 absorbs the actinic radiation.

39. (Original) A compound according to claim 38 wherein $-L^2-L^3$ has the formula:



with one carbon atom at positions a, b, c, d or e being substituted with $-L^3-X$ and optionally one or more of positions b, c, d or e being substituted with alkyl, alkoxy, fluoride, chloride, hydroxyl, carboxylate or amide; and R^1 is hydrogen or hydrocarbyl.

40. (Original) A compound according to claim 39 wherein X is $\text{—}\overset{\text{O}}{\underset{\text{||}}{\text{C}}}\text{—R}^2$ and R^2 is -OH or a group that either protects or activates a carboxylic acid for coupling with another moiety.

41. (Original) A compound according to claim 38 wherein L^3 is selected from a direct bond, a hydrocarbylene, -O-hydrocarbylene, and hydrocarbylene-(O-hydrocarbylene) $_n$ -H, and n is an integer ranging from 1 to 10.

42-51. (Canceled)

52. (Original) A compound according to claim 33 wherein MOI is selected from protein, peptide, oligosaccharide, antibody, antigen, drugs and synthetic organic molecules.

53-61. (Canceled)